

**CLAIMS**

1. A composition for oral administration comprising plant extract and cartilage extract, wherein the plant extract comprises grape seed extract and tomato extract.
2. A composition according to claim 1, wherein the plant extract comprises grape seed extract and tomato extract in a weight/weight ratio of about 2:1 to 1:2.
3. A composition for oral administration comprising plant extract and cartilage extract, wherein the plant extract comprises grape seed extract and lycopene in a weight/weight ratio of about 5:1 to 15:1.
4. A composition according to claim 1, wherein the cartilage extract and the plant extract are present in a weight/weight ratio of about 1:2 to 2:1.
5. A composition according to claim 1, wherein the cartilage extract comprises glycosaminoglycans selected from the group consisting of a chondroitin ester, a keratan ester, hyaluronic acid or an ester thereof, a dermatan ester, heparin, a heparan ester, and epimers and polymers thereof.
6. A composition according to claim 5, wherein the glycosaminoglycans are selected from the group consisting of chondroitin-4-sulphate, chondroitin-6-sulphate, and keratan sulphate.
7. A composition according to claim 6, wherein the cartilage extract comprises chondroitin sulphate.
8. A composition according to claim 1 comprising less than 1% weight/weight collagen.
9. A composition according to claim 1 comprising 0.1 to 5 % of lycopene weight/weight.
10. A composition according to claim 1, wherein said composition increases collagen synthesis by at least 35% as determined by Test Method A.
11. A composition according to claim 1, wherein said composition reduces the harmful effects of oxygen free radicals by at least 40% as measured by MMP-1 activity compared to a control under the conditions of Test method B.

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12. A composition according to claim 1, wherein said composition decreases the formation of advanced glycosylation end products (AGE) by at least 10% as measured under the conditions of Test Method C, as compared to a control.
13. A composition for oral administration, said composition comprising
- cartilage, (one or more compounds extractable therefrom, or (derivatives) thereof,
  - one or more hydrophilic antioxidants, and
  - one or more lipophilic antioxidants;
- wherein said composition <sup>increases</sup> increases collagen synthesis by at least 35% as determined by (Test Method A.)
14. A composition according to claim 13 wherein one or more hydrophilic antioxidants is from grape seed extract.
15. A composition according to claim 13 wherein one or more lipophilic antioxidants is from tomato extract.
16. A composition according to claim 13, wherein the one or more hydrophilic antioxidants is from natural or synthetic sources.
17. A composition according to claim 16, wherein the natural source is selected from the group consisting of pine bark, Vitis vinifera, Camelia sinensis, Aesculus hippocastanum, Gingo biloba, Cardus marianum, Vaccinium myrtillus, Silybum marianum.
18. A composition according to claim 13, wherein the one or more hydrophilic antioxidants is an oligomeric procyanidol.
19. A composition according to claim 13, wherein the one or more hydrophilic antioxidants are extractable from grape seeds of Vitis vinifera.
20. A composition according to claim 13, wherein the one or more lipophilic antioxidants are from a natural or synthetic source.

21. A composition according to claim 20, wherein the natural source is a tomato variety.

22. A composition according to claim 20, wherein tomato extract is the sole source of the lipophilic antioxidant.

23. A composition according to claim 21, wherein the tomato variety is *Lycopersicon*<sup>u</sup> *esculentum*.<sup>y</sup>

24. A composition according to claim 13, wherein the lipophilic antioxidant comprises a carotenoid selected from the group consisting of  $\alpha$ -carotene,  $\beta$ -carotene,  $\gamma$ -carotene,  $\delta$ -carotene, lycopene ( $\psi, \psi$ -carotene), zeaxanthin, cryptoxanthin, lutein, and xanthophyll.

25. A composition according to claim 13, wherein one of the one or more lipophilic antioxidants is lycopene.

26. A composition according to claim 13 comprising 0.1 to 5 % of lycopene weight/weight.

27. A composition according to claim 20, wherein the natural source of one or more lipophilic antioxidants comprises about

5-12% of lycopene;

1-1.5% of tocopherols;

0.05-0.25% of beta-carotene;

0.5-0.75% of phytoene; and

0.5-0.55% of phytofluene.

28. A composition according to claim 1, comprising less than 0.025 % beta-carotene.

29. A composition according to claim 13, wherein the increase in collagen synthesis is at least 40%.

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30. A composition according to claim 13, wherein the composition reduces the harmful effects of oxygen free radicals by at least 40% as measured by MMP-1 activity compared to a control under the conditions of Test Method B.

31. A composition according to claim 30, wherein the harmful effects are due to UV exposure.

32. A composition according to claim 13, wherein said composition decreases the formation of advanced glycosylation end products (AGE) by at least 10% as measured under the conditions of Test Method C, as compared to a control.

33. A composition according to claim 13, wherein the hydrophilic and the lipophilic antioxidants are present in a wt/wt ratio in the range from about 1:1 to about 200:1.

34. A composition according to claim 13, wherein the cartilage, one or more compounds extractable thereof and the hydrophilic antioxidants are present in a wt/wt ratio in the range from about 1:1 to about 200:1.

→ 35. A composition according to claim 13 comprising 0.25-15 mg of lycopene and 2.5-100 mg of grape seed extract.

→ 36. A composition according to claim 13 comprising 1-2.5 mg of lycopene, 5-50 mg of grape seed extract and 50-200 mg of cartilage extract.

37. A composition according to claim 1, comprising

20-40% cartilage extract weight/weight;

1-10% grape seed extract weight/weight; and

1-10% tomato extract weight/weight.

38. A composition according to claim 1, further comprising *Acerola* extract.

39. A composition according to claim 1, comprising

100-110 mg of fish extracts

95-105 mg of plant extracts

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confirms (LIP) 1:100 hydrophilic?

25-35.00 mg of *Acerola* extract

60-90 mg of microcrystalline cellulose

3.5-4.5 mg of silicon dioxide

wherein the plant extracts comprise an oligomeric procyanidol and lycopene and the fish extracts comprise a glycosaminoglycan.

40. A composition according to claim 1, comprising

100-110 mg of fish extracts

95-105 mg of plant extracts

60-65 mg of inulin

25-35.00 mg of ascorbic acid

10-20 mg of zinc gluconate

10-15 mg of silicon dioxide

wherein the plant extracts comprise an oligomeric procyanidol and lycopene and the fish extracts comprise a glycosaminoglycan.

41. A composition according claim 13, wherein the grape seed extract is (formulated for slow release) and the lycopene is formulated for normal release.

42. A composition according to claim 1, for use as an oral cosmetic product, a food or food supplement, a pharmaceutical or a dietetic.

43. A composition according to claim 1, suitable for the general maintenance of healthy skin, to prolong the onset of the degeneration of skin due to ageing or UV exposure, and for the treatment of the signs of ageing in skin.

44. A composition according to claim 1, for use in treating ageing skin, skin exposed to sunlight or other forms of UV radiation, dry skin, rough skin, discoloured skin, skin with acne, scarred skin, skin with stretch marks, eczema or psoriasis.

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45. A composition according to claim 1, wherein the composition is administered in the form of a solid dosage form as tablets, powders, granules, granulates, capsules or sachets or in a form of a liquid dosage form as a solution, suspension, tonic or syrup.

46. A method for the cosmetic or prophylactic treatment of ageing skin, skin exposed to sunlight or other forms of UV radiation, dry skin, rough skin, discoloured skin, skin with acne, scarred skin, skin with stretch marks, eczema or psoriasis, comprising the oral administration of a composition defined in claim 1.

47. A method for the cosmetic or prophylactic treatment of skin against the signs of skin ageing, and damage resulting from exposure to UV radiation comprising the oral administration of a composition defined in claim 1.

48. A method of increasing collagen synthesis or lessening the decrease in collagen synthesis in the dermis comprising the oral administration of a composition defined in claim 1.

49. A composition according to claim 2, wherein the plant extract comprises grape seed extract and tomato extract in a weight/weight ratio of about 1:1.

50. A composition of claim 3 wherein the plant extract comprises grape seed extract and lycopene in a weight/weight ratio of about 10:1.

51. A composition according to claim 4, wherein the cartilage extract and the plant extract are present in a weight/weight ratio of about 1:1.

52. A composition according to claim 5, wherein at least one of the chondroitin ester, keratan ester, hyaluronic acid or ester thereof, dermatan ester, heparin, heparan ester, epimers or polymers thereof is bound to a peptide.

53. A composition according to claim 6, wherein at least one of the chondroitin-4-sulphate, chondroitin-6-sulphate or keratan sulphate is bound to a peptide.

54. A composition according to claim 7, wherein the chondroitin sulphate is bound to a peptide.

55. A composition according to claim 8, comprising less than 0.5% weight/weight collagen.

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56. A composition according to claim 8, comprising less than 0.1% weight/weight collagen.
57. A composition according to claim 8 which is collagen free.
58. A composition according to claim 9, comprising 0.2 to 4% of lycopene weight/weight.
59. A composition according to claim 9 comprising 0.3 to 2% of lycopene weight/weight.
60. A composition according to claim 9 comprising 0.3 to 1% of lycopene weight/weight.
61. A composition according to claim 9 comprising 0.3 to 0.8% of lycopene weight/weight.
62. A composition according to claim 9 comprising 0.3 to 0.6% of lycopene weight/weight.
63. A composition according to claim 11, which reduces the harmful effects of oxygen free radicals by at least 45%, as measured by MMP-1 activity compared to a control under the conditions of Test method B.
64. A composition according to claim 11, which reduces the harmful effects of oxygen free radicals by at least 50%, as measured by MMP-1 activity compared to a control under the conditions of Test method B.

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